## Update on Bilateral Trade in 2003 Between Vietnam and the United States

#### PREFACE AND ACKNOWLEDGEMENTS

The USAID-funded STAR-Vietnam Project, in cooperation with Vietnam's Central Institute of Economic Management (CIEM), has been requested by the Vietnamese Government Steering Committee for Technical Assistance on BTA Implementation and the U.S. Agency for International Development (USAID) to provide economic analysis on the impact of the U.S.-Vietnam Bilateral Trade Agreement (BTA).

This report -- prepared by Professor James Riedel, STAR Senior Economic Advisor, Mr. Steve Parker, STAR Project Director, and Mr. Phan Vinh Quang, STAR Deputy Project Director, working in cooperation with CIEM -- evaluates bilateral trade trends between Vietnam and the United States for 2003. It updates our bilateral trade update for the first six months of 2003 -- An Assessment of the Economic Impact of the United States-Vietnam Bilateral Trade Agreement: Economic Report for the First Six Months of 2003, which was released in November 2003. These semi-annual bilateral trade updates build upon our Annual Economic Report for 2002, which was released in June 2003. A complete and more in-depth report on the economic impact of the BTA for 2003 will be prepared by STAR and CIEM in our Annual Report for 2003, which is expected to be released in July 2004. Funding is provided by USAID.

This report represents the professional analysis of STAR-Vietnam and CIEM based on available information. It does not in any way represent an official interpretation of the BTA or monitoring of the BTA implementation process by either the U.S. or Vietnamese governments.

#### **SUMMARY**

Since the coming into force of the U.S.-Vietnam Bilateral Trade Agreement (BTA) on December 10, 2001, bilateral trade flows between Vietnam and the U.S. have boomed. Vietnamese exports to the U.S. have increased more than four-fold over just two years, growing from \$1.05 billion in 2001 to \$4.55 billion in 2003. Growth in manufactured exports, particularly growth in clothing exports, dominated this trend. Exports to the U.S. have contributed to more than half of Vietnam's overall export growth over the past two years. Over this period, the U.S. became the largest market for Vietnamese exports, and exports of labor-intensive manufactured goods soared, in line with Vietnam's comparative advantage.

Our preliminary analysis suggests strongly, as well, that most of the growth in Vietnamese exports to the U.S. resulted from export creation, that is, exports that can be associated with increases in production and employment, rather than exports to the U.S. resulting from a diversion away from exports to other countries. This and the labor-intensive nature of most exports to the U.S. imply that the rapid expansion of exports to the U.S. over the last two years can be associated with a substantial increase in job opportunities in Vietnam.<sup>1</sup>

In the last six months of 2003, however, Vietnam's rapid increase in exports to the U.S. reversed abruptly, falling from a peak monthly level of US\$514 million in July 2003 to US\$304 million in December 2003. All of this decline can be attributed to a precipitous reduction in clothing exports, which occurred as a result of the implementation of the U.S.-Vietnam Textile Agreement that placed import quotas on most Vietnamese clothing exports to the United States. Although the quota was formally signed on July 17, 2003, it applied retroactively to exports from May 1, 2003. The quota levels available in 2003, in fact, were used up quickly over the first several months of applicability, forcing a major decline in clothing exports over the last six months of 2003, falling from a peak level of US\$337 million in July 2003 to US\$109 million in December 2003. There appears to have been minimal under-fulfillment of quota levels, implying that the export quota system was applied relatively effectively. Primary and non-clothing manufactured exports, on the other hand, grew moderately on a month-by-month basis throughout 2003.

Looking forward to 2004, it can be expected that Vietnam's exports to the U.S. will grow at a more moderate and most likely a more stable growth rate than in 2002 or 2003, as clothing producers plan more effectively with regard to the textile quotas and as non-clothing exports continue to expand steadily. Given the structure of the import quota, it should be expected that Vietnamese exports of clothing in 2004 will increase in the 10-20 percent range. To what degree overall Vietnamese exports to the U.S. will exceed the quota-constrained growth limits for clothing exports will depend greatly on the expansion of domestic and foreign investment in non-clothing export sectors, especially non-clothing manufactured sectors. In 2002 and 2003, Vietnamese exports of furniture, travel goods, footwear and other manufactured goods to the U.S. have grown strongly, but from relatively small initial levels. To continue a rapid increase in Vietnamese exports to the

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<sup>&</sup>lt;sup>1</sup> Based on data collected by surveys on how firms in Vietnam responded to the BTA, and complemented by national data on trade, output and employment, we will attempt to provide estimates of the jobs associated with the rise in Vietnamese exports to the U.S. in our upcoming *Annual Economic Report on the Impact of the BTA for 2003*, which is expected to be released in July 2004.

U.S. in 2004, growth in these sectors must remain robust and a further diversification in exports involving new, fast-growing export sectors will need to emerge.

U.S. exports to Vietnam have surged as well since the implementation of the BTA, nearly tripling from US\$461 million in 2001 to US\$1,324 million in 2003. Vietnam represents one of, if not the, most rapidly expanding markets for U.S. exports. Just as the expansion of clothing exports has dominated overall trends in Vietnamese exports to the U.S., however, U.S. exports to Vietnam have been dominated by a surge in exports of transport equipment, specifically aircraft. If transport equipment is excluded, then U.S. exports to Vietnam have grown more or less on trend at between 20 and 26 percent for a number of years.

This report is organized into four sections. Section I examines Vietnamese exports to the U.S. in 2003, with an emphasis on trends over the last six months of 2003. Section II reviews U.S. exports to Vietnam for 2003. Section III examines the share of U.S. trade in overall Vietnamese exports.

Section IV presents preliminary analysis of whether and to what extent Vietnam's expansion of exports to the U.S. constituted an overall expansion of exports (which we term "export creation"), with positive implications for the growth of output and employment in export industries, or instead were the outcome of a diversion of exports from other destinations (which we term "export diversion"). While export diversion in all likelihood improves the profitability of exporting firms, and thereby implies an overall positive effect on national economic welfare, it does not in and of itself induce an expansion of output and employment in export industries. Our initial analysis shows that the export creation effect of the BTA appears to vastly exceed the export diversion effect.

Finally, four Appendix Tables are provided that provide bilateral trade flows by month for 2001 through 2003 and then annually for 1996 to 2003.

## I. Vietnam's Exports to the United States

## a. Export Growth Rates for 2002 and 2003

The acceleration of export growth in 2002, the first year of the BTA, was spectacular, with overall exports increasing by 128 percent over 2001, manufactures increasing by 500 percent, and within manufactures, clothing exports increasing by almost 1800 percent to become Vietnam's single largest export item (see Table 1). It was inevitable that export growth of the most rapidly expanding items would slowdown in 2003, the second year of the BTA, and as Table 1 indicates, that is exactly what happened. Export growth in 2003, although high, was well below the rates of the previous year, with total manufactures exports to the U.S. increasing 135 percent and clothing 164 percent in 2003. The growth of non-clothing manufactured exports also slowed in 2003, but remained substantial nonetheless, growing by 82 percent.

In our Economic Report for the First Six Months of 2003, we projected Vietnamese exports to the U.S. for all of 2003 to be US\$4.544 million. This projection was based on actual trade data for the first six months of 2003 and rudimentary extrapolations for the last six months of 2003, with clothing exports projected based on information on import quota levels specified in the U.S.-Vietnam Textile Agreement and non-clothing exports projected based on past growth trends for key non-clothing sectors. Somewhat remarkably, actual 2003 exports to the U.S. were US\$4.555, almost exactly at the level projected in the earlier report. At a sectoral level, however, actual exports of clothing in 2003 exceeded our projected level by more than US\$300 million, while actual exports for non-clothing manufactured exports came in at almost US\$300 million less than projected. This implies that the export quotas were fully used up and that some quality upgrading may have occurred among clothing exports. On the other hand, it also shows that growth in non-clothing exports was less strong than expected over the last six months of 2003. With the quota on clothing exports in place at least for 2004 and possibly beyond, future robust growth in Vietnam's exports to the U.S. will depend greatly on expanding and diversifying non-clothing exports, particularly non-clothing manufactured exports, which in turn will depend greatly on expanding domestic and foreign investment in these sectors.

Table 1: Vietnam's Exports to the U.S. in 2002 and 2003 by Commodity Category

	2002	2002 Rate	2003	2003 Rate
	Exports	of Growth	Exports	of Growth
	(US\$ '000)	(%)	(US\$ '000)	%
VN Exports to US	2,394,745	128	4,554,860	90
Primary Products	994,286	21	1,274,979	28
Fish & seafood	616,028	29	732,135	19
Vegetables & fruit	76,000	52	106,001	39
Coffee	53,061	-30	76,301	44
Crude rubber	11,232	300	13,282	18
Petroleum	181,125	-1	277,565	53
Other primary	56,840	92	69,695	23
Manufactures	1,400,461	502	3,290,930	135
NM mineral products	19,590	115	27,939	43
Metal manufactures	8,381	137	15,559	86
Electrical appliances	4,950	270	4,141	-16
Furniture	80,441	499	187,774	133
Travel goods	49,535	5,422	85,955	74
Clothing	900,473	1,769	2,380,249	164
Footwear	224,824	70	327,300	46
Misc. manufactures	28,238	847	48,541	72
Other goods	84,029	297	213,472	154
NC Manufactures*	499,988	162	910,681	82
NCF Manufactures**	275,164	424	583,381	112

Notes: \*Manufactures less clothing; \*\*Manufactures less clothing and footwear. Source: U.S. International Trade Commission website (<a href="www.usitc.gov">www.usitc.gov</a>). Imports from Vietnam into the U.S. are valued "cif," which includes the cost of insurance and freight to ship products from Vietnam to the port of entry into the United States.

### b. Monthly Exports of Key Aggregates in 2002 and 2003

While total exports to the U.S. for the year 2003 grew strongly (90 percent), exports to the U.S. in the second half of the year were markedly below the level recorded in the first half of the year, as Figure 1 indicates. With primary product exports essentially flat over the year, the rapid increase and subsequent decline in total exports in 2003 (see Figure 1) were clearly linked to the performance of clothing exports, which became subject to negotiated export quotas in May 2003 as a result of the U.S.-Vietnam Textile Agreement.<sup>2</sup> Already by early fall 2003 Vietnam had began to run out of quota, and

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<sup>&</sup>lt;sup>2</sup> The formal title of this Agreement is the "Agreement Relating to Trade in Cotton, Wool, Man-Made Fiber, Non-Cotton Vegetable Fiber and Silk Blend Textiles and Textile Products Between the Governments

clothing exports to the U.S. began to fall dramatically, reducing total manufactures and total exports as well.

Vietnamese exports of primary products to the U.S. grew by 28 percent in 2003, compared to 21 percent for 2002, due in large part to higher exports of coffee and petroleum exports in 2003. Rising fish and seafood exports, Vietnam's main primary product export to the U.S., slowed in 2003, in some part as a result of anti-dumping duties applied by the U.S. on Vietnamese exports of frozen fish fillets in January 2003.

was signed on July 17, 2003, and applied retroactively to May 1, 2003. The agreement sets quantitative limits (not value limits) on exports of certain textile and apparel items, which altogether account for about 90 percent of textiles and apparel exported by Vietnam to the U.S. in early 2003. The working assumption in the agreement was that the export value allowed by quota in the base year of 2003 is approximately US\$1.7 billion. Prorated from May 1, 2003, this implies a limit on exports covered by quota for the last eight months of 2003 of US\$1.13 billion. The agreement allows for the quotas to be automatically extended to 2004 and beyond. According to the Agreement on Textiles and Apparel in the WTO, however, the U.S. and all other members of the WTO have agreed to eliminate all textile quotas by January 1, 2005. Whether the textile quotas for Vietnam would be extended through 2005 and beyond will depend upon Vietnam's negotiations to accede to the WTO (Vietnam has announced its desire to join the WTO by 2005). If Vietnam does not accede to the WTO as planned, it would be confronted with the prospect of facing textile

of the United States of America and the Socialist Republic of Vietnam." The full text of the agreement is available on the Department of Commerce website: otexa.ita.doc.gov/#IMPORTQUOTAS. The agreement

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quotas while almost all its competitors would be able to export quota free. Under such a circumstance and according to the terms of the U.S.-Vietnam Textile Agreement, the export quotas would continue until

Vietnam joins the WTO or until its terms are revised in bilateral negotiations.

Figure 1: Vietnam's Monthly Exports to the U.S. in 2002 and 2003 (US\$ thousands)

## c. Clothing Exports in 2002 and 2003

In spite of the sharp decline in clothing exports to the U.S. over the last six months of 2003, total exports for 2003 reached US\$2.38 billion, representing a substantial increase over the US\$900 million registered in 2002. Actual clothing exports in 2003 also exceeded by about 15 percent (around US\$300 million) the projection of clothing exports reported in our *Economic Report for the First Six Months of 2003*, which was based on a simple extrapolation of clothing exports based on the quota limits reported in the U.S.-Vietnam Textile Agreement. The higher-than-projected outcome for clothing exports to the U.S. in 2003 could have occurred for several reasons, which we cited in our previous report: a) the quantitative (per unit) restriction provides an incentive for suppliers to increase the quality and value of each unit of export, thus increasing the average price or unit value of clothing exports; b) the agreement allows Vietnamese exporters to borrow (carry-forward) up to 6 to 8 percent of quota from the succeeding year; and, c) exporters

<sup>&</sup>lt;sup>3</sup> The agreement allows Vietnam in each year to "Swing" quota limits from one (not fully used) category into another (fully used) category by up to 6 percent, as long as a corresponding reduction is made. It also allows exporters each year to redistribute quota not used up in one category to a category that is full, and to "carryover" unused quota for a product from one year to the next, not to exceed 11 percent. These flexibilities are likely to encourage Vietnam to more fully use up the existing quota allocation in 2003, but

can shift into non-quota products. Furthermore, the strong performance of Vietnamese clothing exports since May 2003 suggests that the quota allocation system has operated effectively, generally avoiding under-fulfillment of quota.

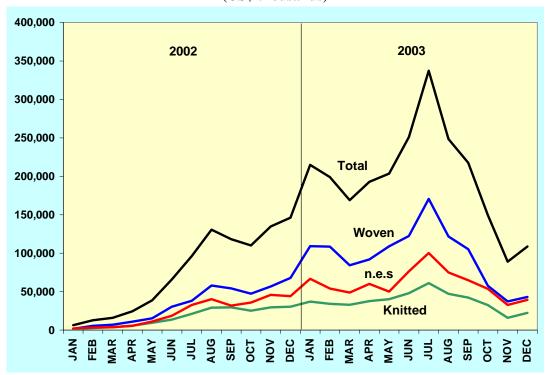
The U.S.-Vietnam Textile Agreement covers not only clothing, but also exports of textile products. However, since the BTA went into effect, exports of clothing products have accounted for 98.5 percent of total textile and clothing exports to the United States. There are three principal sub-categories of clothing exports – clothing from woven fabric, clothing of knitted fabric, and articles of apparel n.e.s. (not elsewhere specified). As Figure 2 indicates, all three sub-categories of clothing exports to the U.S. exhibited a similar profile over 2003, rising rapidly until mid-year and then falling steeply until December. The uniform pattern of clothing exports over the year 2003 reveals that almost all clothing exports were covered by quota, and that almost all clothing exporters front-loaded their exports into the first several months of quota availability, squeezing out quota availability for the last months of 2003. This uniform pattern also shows that there is little evidence that Vietnam exporters were able to diversify into non-quota export items in 2003.

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should not cause export values in 2003 to exceed the specified levels. Lastly, the 2003 quotas will be allowed to grow in 2004 by 7 percent for non-wool products and 2 percent for wool products.

<sup>&</sup>lt;sup>6</sup> Note that the data from Vietnam's General Department of Customs do not match exactly bilateral trade data recorded from the U.S. International Trade Commission (USITC). This results primarily because of normal differences in reporting trade values by exporting and importing countries. Vietnam Customs reports exports "fob," which is the value at the Vietnamese port. The USITC, on the other hand, reports Vietnam's imports into the U.S. on a "cif" basis, which includes the costs, insurance and freight charges required to ship the product from Vietnam to the United States. The difference between the \$3.9 billion of exports to the U.S. reported by Vietnam Customs and the \$4.5 billion of Vietnamese imports into the U.S. reported by the USITC reflects a "cif" margin of around 15 percent, which appears somewhat higher than a more typical "cif" margin of 5-10 percent. Vietnam's Ministry of Trade suggests that it may also be possible that some value added beyond typical transshipment expenses could be added to Vietnamese exports in third countries, but that such value added was not large enough to represent substantial transformation and thus remained as a Vietnam export. Lastly, there can be timing issues. For example, a Vietnamese export leaving Vietnam in January, and thus recorded in the Vietnamese data as an export in January, may not pass through U.S. customs for a month or two. In this case, that same export would not be recorded as an import from Vietnam into the U.S. until February or March.

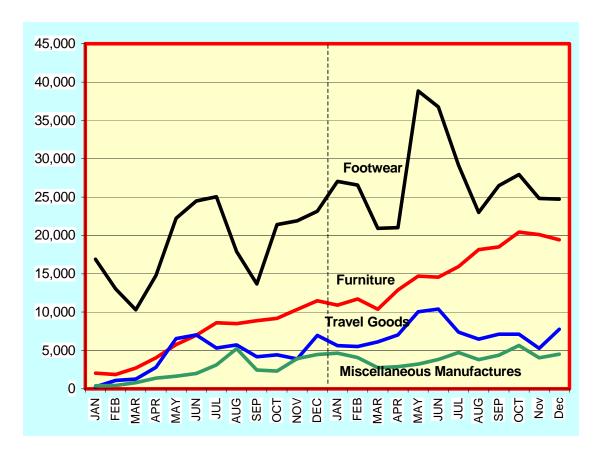
Figure 2: Vietnam's Monthly Exports of Clothing Made of Woven Fabric (SITC 841&842), Knitted Fabric (SITC 843&844) and Articles of Apparel, n.e.s (SITC 845) (US\$ thousands)



#### c. Non-clothing Manufactured Exports

It is important for Vietnam to begin to diversify its manufactured exports in order to reduce its dependence on clothing, which is now subject to export quotas in both the U.S. and EU. Non-clothing manufactured exports to the U.S. continued to grow rapidly in 2003 (82 percent), albeit at rates below those recorded in 2002 (see Table 1). Furniture exports to the U.S. were particularly strong in 2003, surging by more than US\$100 million. Travel goods expanded by 74 percent in 2003, but as Figure 2 indicates, exports of these goods leveled off in 2003. Electrical appliances were the only major manufactured export category that did not expand in 2003. It is worth noting that electronic products, which have figured heavily in the exports of other countries in the region, remain relatively small in Vietnam in general, and are minimal in terms of exports to the United States. Clearly this is an area of considerable potential for export expansion and should be expected to emerge more strongly in the years to come.

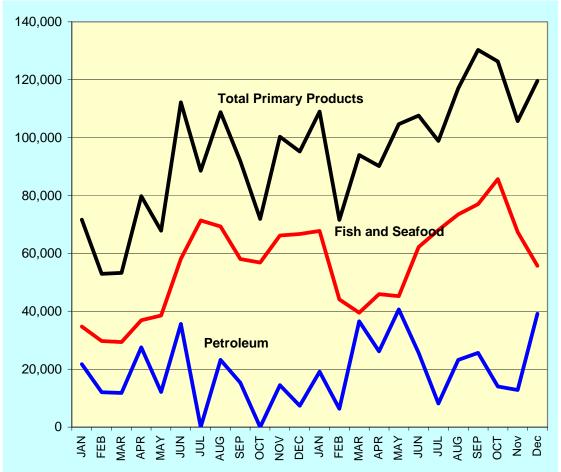
Figure 2: Non-Clothing Manufactured Exports to the U.S.: 2002 and 2003 (monthly) (US\$ thousands)



### d. Primary Product Exports

As noted above, primary product exports to the U.S. grew by 28 percent in 2003, the most rapidly expanding items being coffee and petroleum (see Table 1). Vegetables and fruit exports have grown solidly as well. Growth of Vietnam's principal primary product category, fish and seafood, moderated in 2003 compared to 2002 (19 percent in 2003 versus 29 percent in 2002).

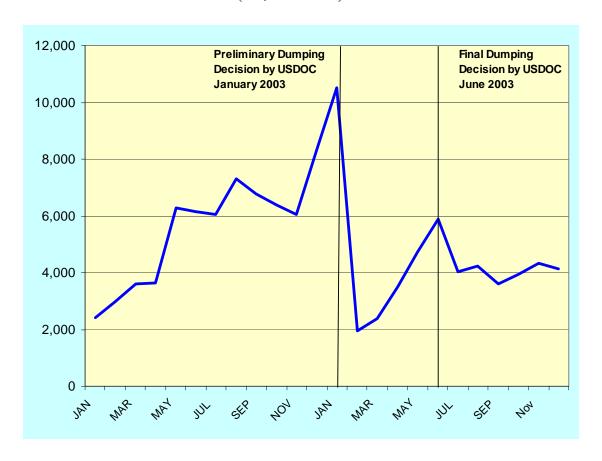
Figure 3: Vietnam's Monthly Exports of Primary Products to the U.S.: 2002 and 2003(US\$ thousands)



## e. Frozen Fish Fillets

The second largest item within the fish and seafood category is frozen fish fillets, mainly fillets of *basa* and *tra* fish (otherwise known as "catfish"). Exports to the U.S. of these products became subject to anti-dumping duties in January 2003 when the preliminary affirmative determination of dumping was made by the U.S. Department of Commerce. The final affirmative determination was made in June 2003, with the anti-dumping duty rates maintained at essentially the same rate as announced in the preliminary determination (31 to 64 percent). As Figure 4 shows, the imposition of anti-dumping duties had a significant negative impact on exports of these products in 2003.

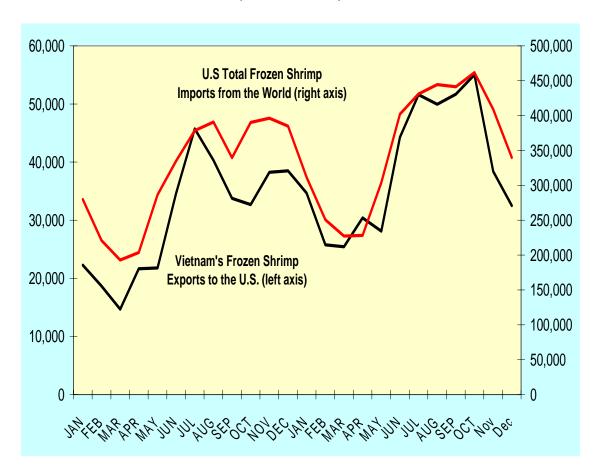
Figure 4: Vietnam's Monthly Exports of Frozen Fish Fillets: 2002 and 2003 (US\$ thousands)



## f. Frozen Shrimp

Frozen shrimp is Vietnam's largest fish and seafood export to the U.S. As Figure 5 shows, Vietnam's exports of frozen shrimp parallel closely U.S. imports of frozen shrimp from the world, maintaining an almost constant market share of ten percent of total imports into the United States. As well, exports of shrimp appear to be highly cyclical. In January 2004, an anti-dumping suit against Vietnamese and a number of other shrimp exporters was filed in the United States. It's not clear whether the threat of this suit affected Vietnamese exports of shrimp to the U.S. in 2003.

Figure 5: Vietnam's Monthly Exports of Frozen Shrimp to the U.S. and U.S. Total Imports of Frozen Shrimp from the World: 2002 and 2003 (US\$ thousands)



# II. U.S. Exports to Vietnam

U.S. exports to Vietnam in 2003 surged by 128 percent over the level recorded in 2002. As Table 2 and Figure 6 indicate, however, the acceleration of export growth in 2003 was entirely due to the growth in exports of one category, transportation equipment, principally aircraft. Exports other than transportation equipment grew by 20 percent in 2003, somewhat lower than in 2002.

Table 2: U.S. Exports to Vietnam in 2002 and 2003 by Commodity Category

	2002 Exports (US\$ '000)	2002 Rate of Growth (%)	2003 Exports (US\$ '000)	2003 Rate of Growth (%)
Total	580,155	26	1,324,440	128
Primary products	121,089	14	144,653	19
Food	49,330	0	48,281	-2
Textile fibers	30,213	0	39,660	31
Other primary	41,546	56	56,712	37
Manufactures	459,061	29	1,179,794	157
Fertilizer	26,004	34	24,231	-7
Plastics & products	25,035	26	35,216	41
Paper products	16,779	-5	21,131	26
Machinery	180,039	42	182,280	1
Transport equipment	91,268	51	739,259	710
Footwear parts	17,804	-8	22,627	27
Scientific equipment	15,440	-4	32,763	112
Other manufactures	86,692	16	122,287	41
<b>Excluding Transportation 1</b>	Equipment			
Total Exports	488,887	23	585,181	20
Manufactured Exports	367,793	25	440,535	20

Source: U.S. International Trade Commission website (<u>www.usitc.gov</u>). U.S. exports to Vietnam are valued "fob," which equals the value of the export at the port of exit from the U.S. to Vietnam.

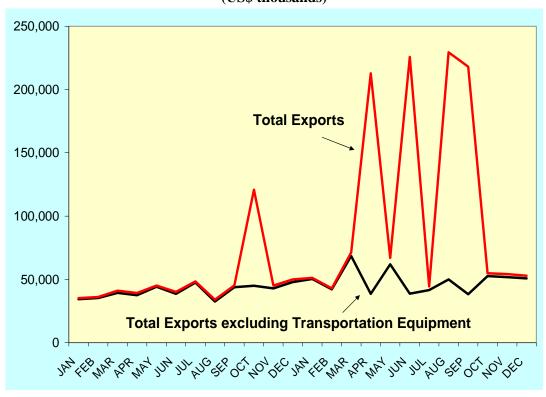


Figure 6: U.S. Monthly Exports to Vietnam: 2002 and 2003 (US\$ thousands)

### III. Trade with the U.S. in Relation to Total Vietnamese Trade

This section reviews the relative importance of the U.S. market both as a destination for Vietnam's exports as well as a source of imports into Vietnam. Using data provided by the Customs Department of Vietnam, we assess trade performance with the U.S. relative to Vietnam's overall trade performance with the rest of the world.<sup>6</sup>

In 2003, the U.S. became Vietnam's largest export market (see Table 3). The share of U.S. exports in total Vietnamese exports grew from around 6 percent in 2001, to 14.5 percent in 2002, and then to 19.5 percent in 2003, reflecting the strong impact of the BTA. According to the Vietnamese Customs data, Vietnam exports to the U.S. in 2003 grew by 63 percent in 2003, substantially faster than did Vietnam's exports to the rest of the world, which grew at a 14 percent rate in 2003. Export growth to the U.S. accounted for 43 percent of overall Vietnamese export growth in 2003.

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<sup>&</sup>lt;sup>7</sup> It should be noted that export growth in 2003 is partly due to higher export prices. According to the Vietnam Economic Times (year end issue: Vietnam Economy 2003 – 2004, page 39), price increases in oil, coffee, rubber and peanuts accounted for 23.3 percent of the overall growth in export values for Vietnam in 2003. It is not clear whether prices for exports to the U.S. grew on average at a different rate than prices for overall exports.

The share of imports from the U.S. into Vietnam more than doubled in 2003, rising from 2.3% of total imports in 2002 to 4.5% in 2003. However, due to its modest share in the total imports, this strong growth accounted for only 12% of the total increase in Vietnam imports.

Vietnam's trade surplus with the U.S. was US\$2.8 billion in 2003, which helped offset a trade deficit with the rest of the world of US\$7.8 billion (see Table 3). Vietnam's overall trade deficit in 2003 was US\$5.1 billion. Although bilateral surpluses and deficits have limited economic consequence in isolation, the expansion of bilateral trade between Vietnam and the U.S since implantation of the BTA has clearly served to strengthen Vietnam's current account balance.

Table 3: Trade with the U.S. Relative to the Total Trade of Vietnam

	2002 (US\$ million)	2003 (US\$ million)	Growth
Export			
Vietnam Exports to U.S.	2,421	3,939	63%
Vietnam Exports to Rest of the World (ROW)	14,253	16,237	14%
Total Vietnam Exports	16,674	20,176	21%
Share of Exports to the U.S. (%)	14.5%	19.5%	43%
Import			
Vietnam Imports from U.S.	457	1,144	150%
Vietnam Imports from ROW	19,098	24,083	26%
Vietnam Total Imports	19,556	25,227	29%
Share of Imports from the U.S. (%)	2.3%	4.5%	12%
Trade balance			
Vietnam Overall Trade Balance	(2,971)	(5,051)	70%
Trade Surplus with the U.S.	1,964	2,794	42%
Trade Deficit with ROW	(4,845)	(7,845)	62%

Source: Vietnam's General Dept. of Customs

Vietnam-U.S. Trade Growth in 2003 160% 150% 140% 120% 100% 80% 63% 60% 43% 40% 29% 26% 21% 14% 20% 0% Vietnam Vietnam Total Share of Vietnam Vietnam Vietnam Share of exports exports Vietnam exports Imports Imports Total import to U.S. to rest of exports to U.S. from U.S. from imports from U.S. the World ROW (ROW)

Figure 7: Vietnam-U.S. Trade Growth in 2003

Source: Vietnam's General Dept. of Customs.

Table 4: Shares of Exports to the U.S. in Selected Sectors

	Exports to U.S. in 2002 (US\$ million)	Exports to U.S. in 2003 (US\$ million)	Total Vietnam Exports in 2002 (US\$ million)	Total Vietnam Exports in 2003 (US\$ million)	U.S. Share of Total Exports in 2003	Growth in the U.S. Share of Total Exports in 2003
Total export	2,421	3,939	16,674	20,176	19.5%	43%
Footwear	197	283	1867	2,270	12%	21%
Fish and seafood	674	775	2023	2,200	35%	57%
Clothing	976	1,974	2,752	3,690	54%	106%
Furniture	45	115	436	563	21%	56%

Source: Vietnam General Dept. of Customs, and *Vietnam Economic Times*, 2003 Year End Issue.

# IV. Export Creation and Export Diversion under the BTA

## a. The Concept of Export Creation and Diversion

The rapid growth of Vietnam's exports to the U.S. and the dramatically rising share of exports destined for the U.S. market are testament to the impact of the BTA since it came into effect on December 10, 2001. A question remains, however, as to whether, and to

what extent, the export opportunities created by the BTA were exploited by expanding overall exports versus to what extent export growth resulted from the diversion of exports from other destinations to the U.S. market. If the growth of exports to the U.S. that occurred after the BTA came into effect was the result of overall export expansion, then it is likely that the BTA has had a significant positive effect on output and employment in export industries, especially in manufacturing. On the other hand, if export expansion in the U.S. market was mainly the result of diverting exports to the U.S. that would otherwise have gone to other destinations, then it is likely that the effect on output and employment has been minimal. An interesting and important question, therefore, is to what extent the BTA led to "export creation" and to what extent to "export diversion."

Before proceeding to analyze this question, it is important to distinguish between the concepts of "export creation and diversion," as they apply in this case, and the concepts of "trade creation and diversion," which are familiar from customs union theory. The formation of a customs union leads to lower barriers to trade with partner countries, but not non-partner countries. The lowering of barriers to trade with partner countries leads to an expansion of trade with those countries, the positive national welfare effect of which is known as the "gain from trade creation." On the other hand, because a customs union discriminates against non-partner countries in favor of partner countries, it can have the effect of diverting trade from lower-cost non-partner countries toward higher-cost partner countries, the negative national welfare effect of which is known as the "loss from trade diversion." The net national welfare effect of joining a customs union is measured by the difference between the *trade creation gain* and the *trade diversion loss* and may, in principle, be either positive or negative.

Unlike trade creation and diversion, the welfare effects of export creation and diversion are both positive, but different in terms of magnitude. Unlike a customs union, which introduces discrimination in international trade, the BTA eliminated discriminatory treatment between trade partners, which raises national economic welfare unambiguously, both from the export creation effect and from the export diversion effect. Clearly export creation improves national welfare, since it generates not only an expansion of trade but also of output and employment in export industries. Export diversion also implies a positive, albeit weaker, welfare effect. Even though it may not cause increased output and employment in export industries, export diversion is likely to have a positive effect on the profitability of exporting firms, since it is likely that firms would divert exports from other markets to the U.S. only if such a shift resulted in higher profits.

## b. Measuring Export Creation and Diversion under the BTA

Measuring export creation and diversion under the BTA presents an insurmountable problem, the need to know the unknowable — that is, the counterfactual outcome of what exports to the U.S. and other countries would have been if the BTA had not come into effect. The only way around this problem is to estimate what exports would have been in the absence of the BTA. The method applied here is to forecast exports to the U.S. and the rest of the world (ROW) for the BTA period based on export trends in the period immediately preceding the BTA, the heroic assumption being that these trends would have continued had the BTA not come into effect. Specifically, we estimate the log-

<sup>&</sup>lt;sup>8</sup> Monthly or quarterly Vietnamese trade data from 2000 through 2003 for the appropriate commodity aggregates are not yet available to carry out this exercise. As a result, partner-country ("mirror") data on imports from Vietnam has been assembled by Development Alternatives Incorporated (DAI), covering

linear trend of exports of selected product categories using quarterly data for the period Q1 2000 to Q4 2001:

$$\log(X_{i,t}) = a + b \cdot t + \varepsilon_{i,t}$$

where  $X_{it}$  is exports to market i (i = US, ROW), t is a time trend for the period Q1 2000 through Q4 2001 (t = 1,2, ...,8) and  $\epsilon_{i,t}$  is the error term and is assumed to have the usual properties. Using estimates of "a" (the intercept) and "b" (the trend growth rate) we forecast exports for the subsequent seven quarters after the BTA came into effect, Q1 2002 through Q3 2003 (the post-BTA period for which we have data on actual exports). The positive difference between actual and forecasted exports to the U.S. we term the "export creation" (EC) effect of the BTA, and the negative difference between actual and forecasted exports to the rest of the world (ROW) we term "export diversion" (ED) effect of the BTA:

$$\begin{split} EC &= \sum\nolimits_{t=Q12002}^{Q32003} (X_{US,t} - X_{US,t}^*) > 0 \\ ED &= \sum\nolimits_{t=Q12000}^{Q32003} (X_{ROW,t} - X_{ROW,t}^*) < 0 \end{split}$$

This method is applied to four categories of exports: (1) total aggregate exports, (2) clothing (HS 61 and 62), (3) footwear (HS 64), and (4) furniture and other wood products (HS 94). Clothing, footwear and furniture have been the most rapidly growing exports to the U.S. and thus it seems likely that, if export diversion occurred, it occurred in these categories. The results are summarized in Table 5 and graphically in Figures 8-11.

about 80 percent of Vietnam's exports to the world. Hence, our reference to the "rest-of-world" other than the United States is somewhat of an exaggeration. To confirm that these results are robust, we plan to use other data sets to recalculate our estimates of export creation and diversion estimates, the results of which will be reported in our 2003 Annual Report.

Table 5: The Difference between Actual and Forecasted Exports to the U.S. and the Rest of the World for Selected Export Categories: Q1 2002 to Q3 2003 (US\$ millions)

Export Categories	Difference between Actual and Forecasted Exports Summed from Q1:02 through Q3:03					
	U.S.	ROW				
Total	3,152.9	2,920.2				
Clothing	2,811.2	-215.4				
Footwear	255.5	1,480.7				
Furniture	164.0	341.8				

As Table 5 indicates, Vietnam's exports to the U.S. from January 2002 through September 2003 were almost US\$3.2 billion greater than forecasted for the period on the basis of the trend in exports to the U.S. in the preceding eight quarters (Q1 2000 to Q4 2001). It seems reasonable to attribute most if not all of this "export creation" to the BTA. Total exports to the rest of the world since December 2001 also expanded beyond what is forecasted based on the earlier trend, but this expansion cannot be reasonably attributed to the BTA. What is significant, given the question at hand, is that there is no evidence of export diversion for total exports—actual total exports exceeded their forecasted level. The expansion of total exports to U.S., it appears, was not at the expense of exports to other destinations, since exports to the rest of the world also expanded in absolute terms (see Figure 8) and relative to the level forecasted on the basis of the trend preceding the BTA.

The only category for which we find evidence of export diversion is clothing, which is where one would expect to find it since clothing is the category in which export expansion to the U.S. has been greatest. As Table 5 reports, however, diversion of clothing exports amounts to a mere US\$215.4 million, only a small fraction of the export creation effect in clothing (US\$2,811.2 million). For footwear and furniture, two of Vietnam's most rapidly growing exports to the U.S., there is no evidence of export diversion. Exports of these two products to the rest of the world expanded after the BTA came into effect in absolute terms and relative to their forecasts based on the preceding trends. We conclude, therefore, that the export creation effect of the BTA vastly exceeds its export diversion effect. Based on these results, is seems safe to predict that when the data become available they will indicate that the BTA has had a significant positive impact on output and employment in Vietnam's export industry.

Figure 8: Vietnam's Quarterly Total Exports (Actual and Forecasted) to: All Countries, the U.S. and Non-U.S. (US\$ millions)

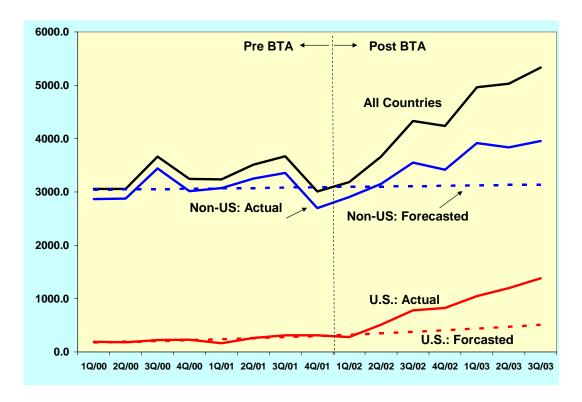


Figure 9: Vietnam's Quarterly Clothing Exports (Actual and Forecasted) to: All Countries, the U.S. and Non-U.S. (US\$ millions)

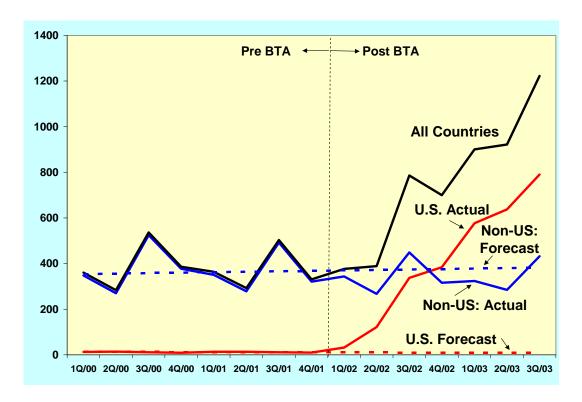


Figure 10: Vietnam's Quarterly Footwear Exports (Actual and Forecasted) to: All Countries, the U.S. and Non-U.S. (US\$ millions)

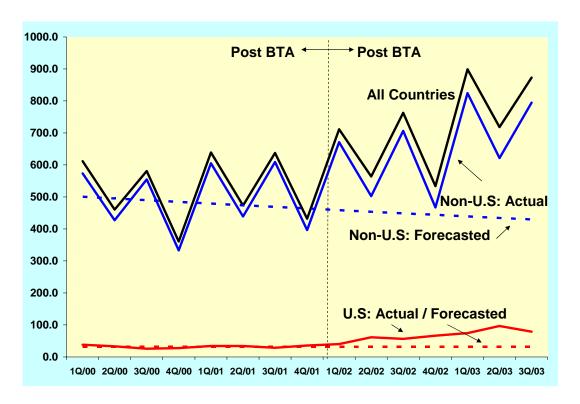
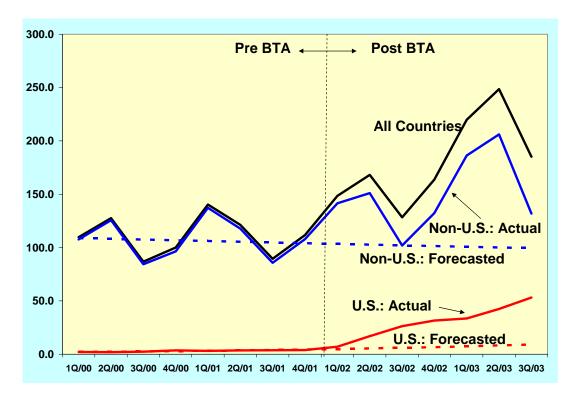


Figure 11: Vietnam's Quarterly Furniture Exports (Actual and Forecasted) to:
All Countries, the U.S. and Non-U.S. (US\$ millions)



Appendix Table I: Vietnam's Exports to the U.S.: Monthly -- January 2002 through December 2003 (US\$ thousands)

	2002 1	2002 2	2002 3	2002 4	2002 5	2002 6	2002 7	2002 8	2002 9
VN Exports to U.S.	101,577	87,744	90,505	134,021	151,557	226,891	238,226	288,733	251,982
Primary Products	71,670	52,913	53,306	79,793	67,803	112,170	88,562	108,788	91,889
Fish & seafood	34,717	29,713	29,384	36,897	38,549	58,113	71,403	69,321	58,081
Vegetables & fruit	5,824	3,509	3,473	3,315	3,954	4,985	7,353	8,063	9,743
Coffee	6,562	4,990	6,064	5,725	3,885	4,143	2,736	2,497	2,770
Crude rubber	461	766	485	1,019	1,009	990	292	794	926
Petroleum	21,761	12,026	11,750	27,523	12,096	35,585	0	23,236	15,291
Other primary	2,345	1,909	2,150	5,314	8,310	8,354	6,778	4,877	5,078
Manufactures	29,909	34,831	37,199	54,229	83,755	114,721	149,663	179,945	160,093
NM mineral products	1,077	1,469	1,871	1,611	1,699	1,577	1,671	1,525	1,700
Metal manufactures	471	959	525	392	733	748	929	614	1,041
Electrical appliances	270	437	321	701	512	344	356	314	354
Furniture	2,038	1,864	2,715	4,042	5,766	6,989	8,619	8,489	8,898
Travel goods	258	1,090	1,267	2,807	6,551	7,025	5,310	5,735	4,183
Clothing	6,335	12,931	16,021	24,507	38,654	65,802	96,190	130,732	118,143
Footwear	16,892	13,029	10,302	14,779	22,238	24,500	25,039	17,907	13,675
Misc. manufactures	394	439	810	1,400	1,649	2,002	3,122	5,248	2,445
Other goods	2,174	2,613	3,367	3,990	5,953	5,734	8,427	9,381	9,654
NC Manufactures	23,574	21,900	21,178	29,722	45,101	48,919	53,473	49,213	41,950
NCF Manufactures	6,682	8,871	10,876	14,943	22,863	24,419	28,434	31,306	28,275

Notes: \*Manufactures exports less clothing. \*\*Manufactures exports less clothing and footwear. General

imports valued at cif.

Source: U.S. International Trade Commission website (www.usitc.gov)

(Continued on the next page)

## Appendix Table I (Continued): Vietnam's Exports to the U.S.: Monthly -- January 2002 through December 2003 (US\$ thousands)

	2002 10	2002 11	2002 12	2003 1	2003 2	2003 3	2003 4	2003 5	2003 6
VN Exports to U.S.	231,516	286,872	305,121	388,910	337,580	320,320	352,954	397,428	445,065
Primary Products	71,873	100,335	95,184	108,977	71,559	94,019	90,224	104,689	107,628
Fish & seafood	56,874	66,228	66,748	67,762	44,066	39,510	45,944	45,200	62,242
Vegetables & fruit	7,391	9,319	9,071	8,978	5,213	4,003	5,275	5,392	8,190
Coffee	3,188	4,423	6,078	7,687	4,917	7,215	5,109	5,235	3,606
Crude rubber	943	1,841	1,706	1,547	1,438	2,179	1,193	489	397
Petroleum	0	14,505	7,352	19,168	6,311	36,566	26,162	40,651	25,608
Other primary	3,477	4,019	4,229	3,835	9,614	4,546	6,541	7,722	7,585
Manufactures	159,643	186,536	209,937	279,933	266,020	226,300	262,730	292,740	337,437
NM mineral products	1,528	1,394	2,468	3,663	3,164	2,509	2,867	2,510	1,619
Metal manufactures	367	717	885	1,112	1,012	1,033	844	1,715	1,123
Electrical appliances	106	461	774	278	63	215	525	155	378
Furniture	9,184	10,349	11,488	10,921	11,707	10,387	12,902	14,708	14,553
Travel goods	4,433	3,902	6,974	5,641	5,514	6,125	7,034	10,039	10,401
Clothing	110,148	134,831	146,179	214,942	199,064	168,972	192,676	203,592	250,935
Footwear	21,416	21,898	23,149	27,043	26,580	20,923	21,009	38,845	36,753
Misc. manufactures	2,307	3,943	4,479	4,652	4,086	2,748	2,888	3,211	3,834
Other goods	10,154	9,041	13,541	11,681	14,830	13,388	21,985	17,965	17,841
NC Manufactures*	49,495	51,705	63,758	64,991	66,956	57,328	70,054	89,148	86,502
NCF Manufactures**	28,079	29,807	40,609	37,948	40,376	36,405	49,045	50,303	49,749

Notes: \*Manufactures exports less clothing. \*\*Manufactures exports less clothing and footwear. General imports valued at cif.

Source: U.S. International Trade Commission website (<u>www.usitc.gov</u>)

(Continued on the next page)

## Appendix Table I (Continued): Vietnam's Exports to the U.S.: Monthly -- January 2002 through December 2003 (US\$ thousands)

	2003 7	2003 8	2003 9	2003 10	2003 11	2003 12
VN Exports to U.S.	513,592	439,521	426,368	358,190	270,621	304,311
Primary Products	98,861	117,060	130,310	126,315	105,679	119,658
Fish & seafood	68,120	73,462	77,013	85,711	67,387	55,718
Vegetables & fruit	10,084	11,265	12,694	12,165	11,150	11,592
Coffee	5,184	4,461	7,165	10,148	8,505	7,069
Crude rubber	777	456	328	1,149	1,660	1,669
Petroleum	8,160	23,190	25,679	14,077	12,799	39,194
Other primary	6,536	4,226	7,431	3,065	4,178	4,416
Manufactures	414,729	322,460	296,058	231,874	164,943	195,706
NM mineral products	2,006	1,943	1,381	1,733	1,559	2,985
Metal manufactures	1,504	1,562	1,367	1,215	1,469	1,603
Electrical appliances	454	330	404	508	351	480
Furniture	15,943	18,161	18,500	20,439	20,125	19,428
Travel goods	7,397	6,472	7,132	7,131	5,288	7,781
Clothing	337,327	248,431	217,544	149,184	88,945	108,637
Footwear	29,164	22,996	26,486	27,940	24,825	24,736
Misc. manufactures	4,733	3,803	4,383	5,656	4,038	4,509
Other goods	16,201	18,762	18,861	18,068	18,343	25,547
NC Manufactures	77,402	74,029	78,514	82,690	75,998	87,069
NCF Manufactures	48,238	51,033	52,028	54,750	51,173	62,333

Notes: \*Manufactures exports less clothing. \*\*Manufactures exports less clothing and footwear. General imports valued at cif.

Source: U.S. International Trade Commission website (www.usitc.gov).

# Appendix Table II: U.S. Exports to Vietnam: Monthly -- January 2002 through December 2003 (US\$ thousands)

	2002 1	2002 2	2002 3	2002 4	2002 5	2002 6	2002 7	2002 8	2002 9
U.S. Exports to VN	35,209	36,019	41,055	39,200	45,067	40,076	48,410	33,985	45,228
Primary products	8,077	8,712	10,686	10,173	12,208	12,585	8,200	9,313	14,546
Food	2,146	2,452	3,478	2,756	3,869	6,081	2,470	3,643	8,895
Textile fibers	2,356	3,132	3,315	4,306	4,221	2,835	2,123	2,256	2,051
Other primary	3,575	3,128	3,893	3,111	4,118	3,669	3,607	3,414	3,600
	•	•	•	•	•	•		•	•
Manufactures	27,132	27,306	30,370	29,027	32,858	27,490	40,209	24,673	30,680
Fertilizer	3,274	1,900	6,447	87	6,760	0	41	132	10
Plastics & products	1,873	1,787	1,574	2,247	1,962	1,610	1,693	1,840	2,257
Paper products	1,130	831	1,507	810	2,502	1,089	999	1,077	1,469
Machinery	10,041	12,595	9,121	15,732	11,182	13,589	28,118	11,448	13,601
Transport equipment	837	733	1,678	1,670	887	1,536	960	1,452	1,423
Footwear parts	1,528	1,140	1,737	1,575	1,026	1,882	1,572	1,457	1,520
Scientific equipment	1,372	616	1,490	1,208	1,435	1,087	1,485	921	811
Other manufactures	7,077	7,704	6,816	5,698	7,104	6,697	5,341	6,346	9,589
Excluding Transport eq	uipment	•	•	•	•	•	•	•	•
Total Exports	34,372	35,286	39,377	37,530	44,180	38,540	47,450	32,533	43,805
Manufactures	26,295	26,573	28,692	27,357	31,971	25,954	39,249	23,221	29,257

Source: U.S. International Trade Commission website (<u>www.usitc.gov</u>). U.S. exports valued fob.

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# Appendix Table II (Continued): U.S. Exports to Vietnam: Monthly -- January 2002 through December 2003 (US\$ thousands)

	2002 10	2002 11	2002 12	2003 1	2003 2	2003 3	2003 4	2003 5	2003 6
U.S. Exports to VN	120,793	45,155	49,958	51,149	42,893	71,165	212,706	67,033	225,735
Primary products	9,758	8,991	7,840	19,642	8,746	11,930	11,219	11,113	8,605
Food	5,135	4,643	3,762	8,179	2,163	4,565	4,565	3,933	2,636
Textile fibers	897	1,169	1,552	3,253	4,150	4,106	3,052	4,499	3,254
Other primary	3,726	3,179	2,526	8,210	2,433	3,259	3,602	2,681	2,715
	•			•					
Manufactures	111,034	36,164	42,118	31,508	34,148	59,235	201,487	55,921	217,130
Fertilizer	4,899	1,243	1,211	36	4,445	59	137	722	75
Plastics & products	1,945	3,006	3,241	3,004	2,986	5,586	2,108	2,066	1,760
Paper products	1,842	2,206	1,317	1,036	1,068	1,714	1,436	1,656	1,282
Machinery	15,074	17,338	22,200	12,896	9,740	32,199	11,506	27,738	11,520
Transport equipment	75,792	2,268	2,032	743	756	2,750	174,119	5108	187,088
Footwear parts	1,806	1,176	1,385	1,420	1,750	2,285	2,002	2,187	1,765
Scientific equipment	1,308	1,417	2,290	1,910	1,657	5,152	1,226	5,590	2,847
Other manufactures	8,368	7,510	8,442	10,463	11,746	9,490	8,953	10,854	10,793
Excluding Transport eq	uipment							. U	
Total Exports	45,001	42,887	47,926	50,406	42,137	68,415	38,587	61,925	38,647
Manufactures	35,242	33,896	40,086	30,765	33,392	56,485	27,368	50,813	30,042

Source: U.S. International Trade Commission website (<u>www.usitc.gov</u>). U.S. exports valued fob.

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# Appendix Table II (Continued): U.S. Exports to Vietnam: Monthly -- January 2002 through December 2003 (US\$ thousands)

	2003 7	2003 8	2003 9	2003 10	2003 11	2003 12
U.S. Exports to VN	44,419	229,451	218,033	54,766	54,236	52,854
Primary products	12,879	12,490	9,636	17,771	10,226	10,396
Food	3,022	4652	3,711	4,202	2,624	4,029
Textile fibers	5,680	3,728	1,309	3,054	1,827	1,748
Other primary	4,177	4,110	4,616	10,515	5,775	4,619
Manufactures	31,541	216,961	208,399	36995	44010	42459
Fertilizer	31	4,015	97	5,070	8,345	1,199
Plastics & products	2,686	3,163	3,028	2,843	2,641	3,345
Paper products	1,196	1,980	3,208	1,525	2,019	3,011
Machinery	11,613	12,798	10,341	11,088	13,578	17,265
Transport equipment	2,795	179,434	179,785	2,148	2,473	2,060
Footwear parts	2,127	1,614	1,664	1,707	2,499	1,607
Scientific equipment	1,519	4,951	2,387	1,536	2,063	1,925
Other manufactures	9,574	9,006	7,889	11,078	10,392	12,047
Total Exports	41,624	50,017	38,248	52,618	51,763	50,794
Manufactures	28,746	37,527	28,614	34,847	41,537	40,399

Source: U.S. International Trade Commission website (<u>www.usitc.gov</u>). U.S. exports valued fob.

Appendix Table III: The Composition of Vietnamese Exports to the U.S.: 1996 to 2003 (US\$ thousands)\*

	1996	1997	1998	1999	2000	2001	2002	2003
VN Exports to U.S.	319,037	388,189	553,408	608,953	821,658	1,052,626	2,394,746	4,554,860
Primary Products	247,042	251,736	390,457	399,352	592,733	819,813	994,284	1,274,979
Fish & seafood	34,066	56,848	94,368	139,535	300,988	478,227	616,029	732,135
Vegetables & fruit	10,061	18,835	26,446	28,840	52,906	50,126	76,000	106,001
Coffee	109,445	104,678	142,585	100,250	113,036	76,185	53,060	76,301
Crude rubber	413	2,135	1,767	2,505	5,330	2,807	11,231	13,282
Petroleum	80,650	34,622	107,374	100,633	88,412	182,798	181,125	277,565
Other primary	12,407	34,618	17,917	27,589	32,061	29,670	56,839	69,695
Manufactures	71,995	136,453	162,951	209,601	228,925	232,814	1,400,461	3,290,930
NM mineral products	913	1,648	3,383	4,849	6,670	9,108	19,589	27,939
Metal manufactures	81	183	792	3,091	3,226	3,538	8,382	15,559
Electrical appliances	81	225	298	608	603	1,338	4,952	4,141
Furniture	264	437	1,193	3,697	9,186	13,427	80,441	187,774
Travel goods	365	473	625	1,265	1,606	897	49,534	85,955
Clothing	23,755	26,009	28,462	36,152	47,427	48,174	900,473	2,380,249
Footwear	39,169	97,644	114,917	145,775	124,871	132,195	224,825	327,300
Misc. manufactures	1,151	1,717	947	1,518	14,527	2,981	28,238	48,541
Other goods	6,216	8,117	12,334	12,646	20,809	21,156	84,027	213,472

Source: U.S. International Trade Commission website (www.usitc.gov). General imports valued at cif.

Appendix Table IV: The Composition of U.S. Exports to Vietnam: 1996 to 2003\* (US\$ thousands)

	1996	1997	1998	1999	2000	2001	2002	2003
U.S. Exports to VN	616,047	277,787	274,217	290,659	367,715	460,892	580,154	1,324,440
Primary products	43,386	49,617	27,461	40,321	68,477	106,324	121,090	144,653
Food	17,965	26,633	15,941	27,393	37,350	49,327	49,331	48,281
Textile fibers	12,880	11,781	4,446	4,937	16,028	30,292	30,213	39,660
Other primary	12,541	11,203	7,074	7,991	15,099	26,705	41,546	56,712
Manufactures	572,661	228,170	246,756	250,338	299,238	354,569	459,065	1,179,794
Fertilizer	52,259	8,943	42,294	47,224	29,432	19,434	26,004	24,231
Plastics & products	6,671	6,376	4,777	10,280	16,452	19,862	25,036	35,216
Paper products	10,681	4,099	5,512	8,489	7,611	17,601	16,778	21,131
Machinery	111,549	101,923	102,506	92,095	141,784	126,928	180,040	182,280
Transport equipment	307,598	17,217	9,975	2,834	7,650	60,436	91,267	739,259
Footwear parts	14,035	16,372	17,371	29,569	27,460	19,276	17,804	22,627
Scientific equipment	11,039	13,839	12,002	8,939	10,768	16,083	15,440	32,763
Other manufactures	58,829	59,401	52,319	50,908	58,081	74,949	86,696	122,287

Source: U.S. International Trade Commission website (<u>www.usitc.gov</u>). Exports valued at fob.